



STEVEN L. BESHEAR  
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET**

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

200 FAIR OAKS LANE

FRANKFORT, KENTUCKY 40601

[www.kentucky.gov](http://www.kentucky.gov)

LEONARD K. PETERS  
SECRETARY

**FACT SHEET**

**KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE TREATED WASTEWATER  
INTO WATERS OF THE COMMONWEALTH**

KPDES No.: KY0094447      Permit Writer: Diana Davidson      Date: December 8 2009  
AI No.: 3830

**1. SYNOPSIS OF APPLICATION**

a. Name and Address of Applicant

City of Science Hill  
P.O. Box 97  
Science Hill, Kentucky 42553

b. Facility Location

Science Hill Waste Water Treatment Plant  
400 Ebright Street  
Science Hill, Pulaski County, Kentucky

c. Description of Applicant's Operation

City Wastewater Treatment Plant

d. Design Capacity

0.150 MGD

e. Description of Existing Pollution Abatement Facilities

Treatment process consists of screening, grit removal, primary settling, oxidation ditch, secondary settling, chlorine disinfection, dechlorination, and post aeration. Solids are processed by: sludge holding tanks, sludge drying beds, and landfill disposal.

f. Permitting Action

This is a reissuance of a minor KPDES permit for a municipally owned wastewater treatment plant serving the city of Science Hill.

2. RECEIVING WATER

a. Name/Mile Point

Facility discharges to a tributary (Bobbitt's Branch) to Big Clifty Creek at latitude 37° 10' 40" and longitude 84° 38' 29".

b. Stream Segment Use Classification

Pursuant to 401 KAR 10:026, Section 5, the tributary to Big Clifty Creek Branch carries the following classifications:

Warmwater Aquatic Habitat, Primary/Secondary Contact Recreation, Fish Consumption, and Domestic Water Supply

c. Stream Segment Categorization

Pursuant to 401 KAR 10:030, Section 1, the tributary to Big Clifty Creek is categorized as a High Quality Water.

The Divisions's Total Maximum Daily Load (TMDL) for the Upper Cumberland River and its tributaries was approved in 1998 by the United States Environmental Protection Agency Region IV meeting full compliance with Section 303(d) of the Clean Water Act, which requires that TMDLs be established at levels necessary to implement the applicable water quality standards. This TMDL is required for all point sources to meet an *Escherichia Coli* limit of 130 colonies /100 ml as an average with a 240 colonies /100 ml as a maximum (frequency depending on the size of the facility).

d. Stream Low Flow Condition

The 7-day, 10-year low flow and harmonic mean conditions of the tributary to Big Clifty Creek are 0.0 and unknown cfs, respectively.

**3. REPORTED DISCHARGE AND PROPOSED LIMITS**

4.

Serial Number 001 - Sanitary Wastewater (Design Flow = 0.150 MGD)

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Effluent Flow (MGD)	0.0848	0.1878	Report	Report	401 KAR 5:065, Section 2(4)
Influent Flow (MGD)	NR	NR	Report	Report	401 KAR 5:065, Section 2(8) 40 CFR 122.4(i)(1)(ii)
Effluent CBOD <sub>5</sub> (mg/l)	3.92	8.02	25	37.5	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
Influent CBOD <sub>5</sub> (mg/l)	243.53	355.05	Report	Report	401 KAR 5:065, Section 2(8)
Percent Removal CBOD <sub>5</sub> (%)	96.7	99.3	85 or greater		40 CFR 133.102(a)3
Effluent TSS (mg/l)	7.30	13.76	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 2 and 3
Influent TSS (mg/l)	285.86	531	Report	Report	401 KAR 10:031, Section 4
Percent Removal TSS (%)	97.06	99.8	85 or greater		40 CFR 133.102(b)3
Fecal Coliform (N/100 ml)	222.33	309.91	Removing from permit		401 KAR 5:080, Section 2(3)
<i>Escherichia Coli</i> (N/100 ml)	NR	NR	130	240	401 KAR 10:031, Section 7 401 KAR 5:045, Section 4 401 KAR 5:080, Section 2(3)
Ammonia Nitrogen (as mg/l N)					
May 1 - October 31	1.31	2.10	4.0	6.0	401 KAR 10:031, Section 4
November 1 - April 30	1.18	1.47	10	15	401 KAR 5:045, Sections 3 and 5
Dissolved Oxygen (mg/l) (minimum)	9.90	N/A	Not less than 7.0		401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
pH (standard units)	3.56	7.73	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4 401 KAR 5:045, Section 4

### 3. REPORTED DISCHARGE AND PROPOSED LIMITS - SANITARY FACILITY

Serial Number 001 - Sanitary Wastewater (Design Flow = 0.150 MGD)

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Total Residual Chlorine (mg/l)	0.008	0.013	0.011	0.019	401 KAR 10:031, Section 4(k)
Total Phosphorus (mg/l)	NR	NR	Report	Report	401 KAR 5:065, Section 2(8) 401 KAR 5:080, Section 2(3)
Total Nitrogen (mg/l)	NR	NR	Report	Report	401 KAR 5:065, Section 2(8)

The data contained under the reported discharge columns is not from the renewal application, but rather from the analysis of the DMR data that has been reported during the term of the previous permit.

The abbreviation CBOD<sub>5</sub> means Carbonaceous Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation NR means not reported on the Discharge Monitoring Report (DMR).

The effluent limitations for CBOD<sub>5</sub> and TSS are Monthly (30 day) and Weekly (7 day) Averages.

The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.

Total Nitrogen is to be reported as the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen.

4. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Outfall 001 Sanitary Wastewater (Design Flow = 0.150 MGD)

b. Effluent Characteristics

Flow (Influent/Effluent), CBOD<sub>5</sub> (Influent/Effluent), TSS (Influent/Effluent), Fecal Coliform Bacteria, *Escherichia Coli*, pH, Ammonia Nitrogen, Dissolved Oxygen, Total Phosphorus, Total Nitrogen, and Total Residual Chlorine (TRC).

c. Pertinent Factors

None

d. Monitoring Requirements

Influent sampling shall be conducted at the nearest accessible point in the collection system but prior to commencement of treatment.

Effluent sampling shall be conducted at the nearest point after final treatment but prior to discharge to or mixing with the receiving waters.

Effluent Flow monitoring shall be conducted continuously by recorder.

Influent Flow monitoring shall be conducted instantaneously once per week.

CBOD<sub>5</sub> (Influent/Effluent) and TSS (Influent/Effluent) monitoring shall be conducted once per week by 24 hour composite sampling.

Percent Removal shall be determined monthly by calculation.

Ammonia Nitrogen, Total Phosphorus and Total Nitrogen shall be monitored once per week by 24 hour composite sampling.

*Escherichia Coli*, pH, Dissolved Oxygen and Total Residual Chlorine shall be monitored once per week by grab sample.

e. Justification of Conditions

The Kentucky regulations cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

*Escherichia Coli* and Fecal Coliform Bacteria

The limits for *Escherichia Coli* are consistent with the requirements of 401 KAR 10:031, Section 7, 401 KAR 5:045 Section 4 and 401 KAR 5:080, Section 2(3). The removal of Fecal Coliform Bacteria is consistent with the requirements of 401 KAR 5:080k Section 2(3). Although Fecal Coliform Bacteria has been used as an indicator of fecal contamination, it does contain other species that are not necessarily fecal in origin. EPA recommends *Escherichia Coli*, which is specific to fecal material from warm-blooded animals, as the best indicator of health risk from contact with recreational waters. Therefore, it is the "Best Professional Judgment "BPJ" of the Division of Water that *Escherichia Coli* replace Fecal Coliform Bacteria on this permit.

Flow (Influent/Effluent)

The monitoring requirements for this parameter are consistent with the requirements of 40 CFR 122.44(i)(1)(ii) as incorporated by 401 KAR 5:065, Section 2(4).

Influent CBOD<sub>5</sub>, Influent TSS, and Percent Removal

The monitoring requirements for influent CBOD<sub>5</sub> and influent TSS are consistent with the requirements of 401 KAR 5:065, Section 2(8). The raw influent values of these two parameters are necessary to determine compliance with the 85 percent removal requirement specified by 40 CFR 133.102 (a)3 and (b)3.

CBOD<sub>5</sub>, Ammonia Nitrogen, and Dissolved Oxygen

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4, and 401 KAR 5:045, Sections 3 and 5. Section 4 of 5:031 establishes water quality criteria for the protection of Kentucky's waters. Section 5 of 5:045 requires biochemically degradable wastewaters to receive treatment in excess of secondary treatment if the Cabinet determines that the receiving water would not satisfy applicable water quality standards as a result of a facility discharge or discharges from multiple facilities.

Total Suspended Solids

The limits for this parameter are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Sections 2 and 3. Section 4 of 5:031 establishes water quality criteria for the protection of Kentucky's waters. Sections 2 and 3 of 5:045 require biochemically degradable wastewaters to receive secondary treatment.

pH

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Section 4. Section 4 of 5:031 establishes water quality criteria for the protection of Kentucky's waters. Section 4 of 5:045 establishes the acceptable levels of these parameters for biochemically degradable wastewaters.

Total Residual Chlorine

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4.

Total Phosphorus and Total Nitrogen

The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8)(a). Total Nitrogen is TKN (as N) and nitrate/nitrite (as N).

**5. ANTIDegradation**

The conditions of 401 KAR 10:029, Section 1 have been satisfied by this permit action. Since this permit action involves reissuance of an existing permit, and does not propose an expanded discharge, a review under 401 KAR 10:030 Section 1 is not applicable.

**6. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS**

The permittee will comply with all effluent limitations by the effective date of the permit.

**7. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE**

**Annual Sewer User Surveys**

Consistent with the requirements of 401 KAR 5:057 and 401 KAR 5:080, Section 2(3) the permittee shall conduct annual sewer user surveys to determine if conditions warrant the development and implementation of a pretreatment program. This condition is representative of the Division of Water's "Best Professional Judgment" that such surveys are necessary to demonstrate compliance with 401 KAR 5:057.

**Best Management Practices (BMP) Plan**

Pursuant to 401 KAR 5:065, Section 2(10), a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through storm water runoff or spillage. Some of these areas will drain to present wastewater treatment plants, others will not.

**Certified Operators**

Pursuant to 401 KAR 5:010, Section 1 wastewater systems shall be operated under the supervision of a certified operator who holds a Kentucky Certificate equivalent to the class of system being supervised.

Pursuant to 401 KAR 5:010, Section 3 the certified operator shall be reasonably available if not physically present while the system is operating.

**Outfall Signage**

It is the Best Professional Judgment of the Division of Water, 401 KAR 5:080, Section 2(3), that all permittees post a marker at all discharge locations and/or monitoring points. The marker shall be of sufficient size to display the Permittee Name, KPDES permit and outfall numbers in 2 inch letters and shall be prominently displayed. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and is to be posted as near as possible to the actual sampling location.

**Pretreatment Requirements**

Pursuant to the requirements of 40 CFR 403, July 1, 2006 as incorporated by 401 KAR 5:057, November 11, 2008 a Publicly Owned Treatment Works (POTW) is required to implement the National Pretreatment Standards to control pollutants which pass through or interfere with the treatment process of the POTW or which may contaminate the sewage sludge. These requirements include specific prohibitions and the necessity to develop and implement a Pretreatment Program if one or more specific criteria are met.

**Sludge Disposal**

The disposal or final use of sewage sludge generated during the treatment of domestic sewage in a treatment works is subject to federal requirements specified in 40 CFR Part 503 and state requirements specified in Division of Waste Management regulations 401 KAR Chapter 45.

**8. PERMIT DURATION**

Five (5) years. This facility is in the Four Rivers, Upper and Lower Cumberland Basin Management Unit as per the Kentucky Watershed Management Framework.

**9. PERMIT INFORMATION**

The application, draft permit, fact sheet, public notice, comments received and additional information is available from the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

**10. REFERENCES AND CITED DOCUMENTS**

All material and documents referenced or cited in this fact sheet are parts of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

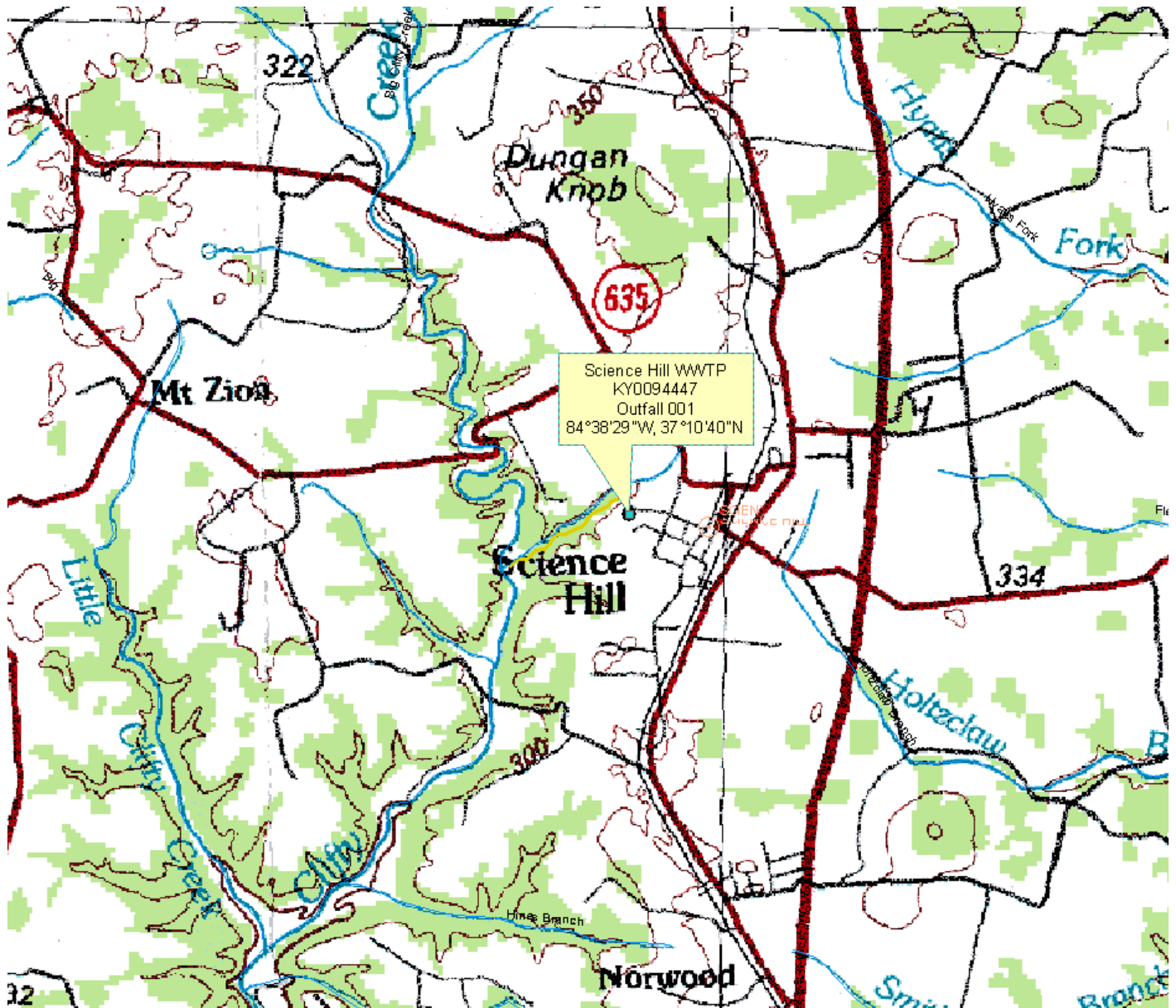
**11. CONTACT**

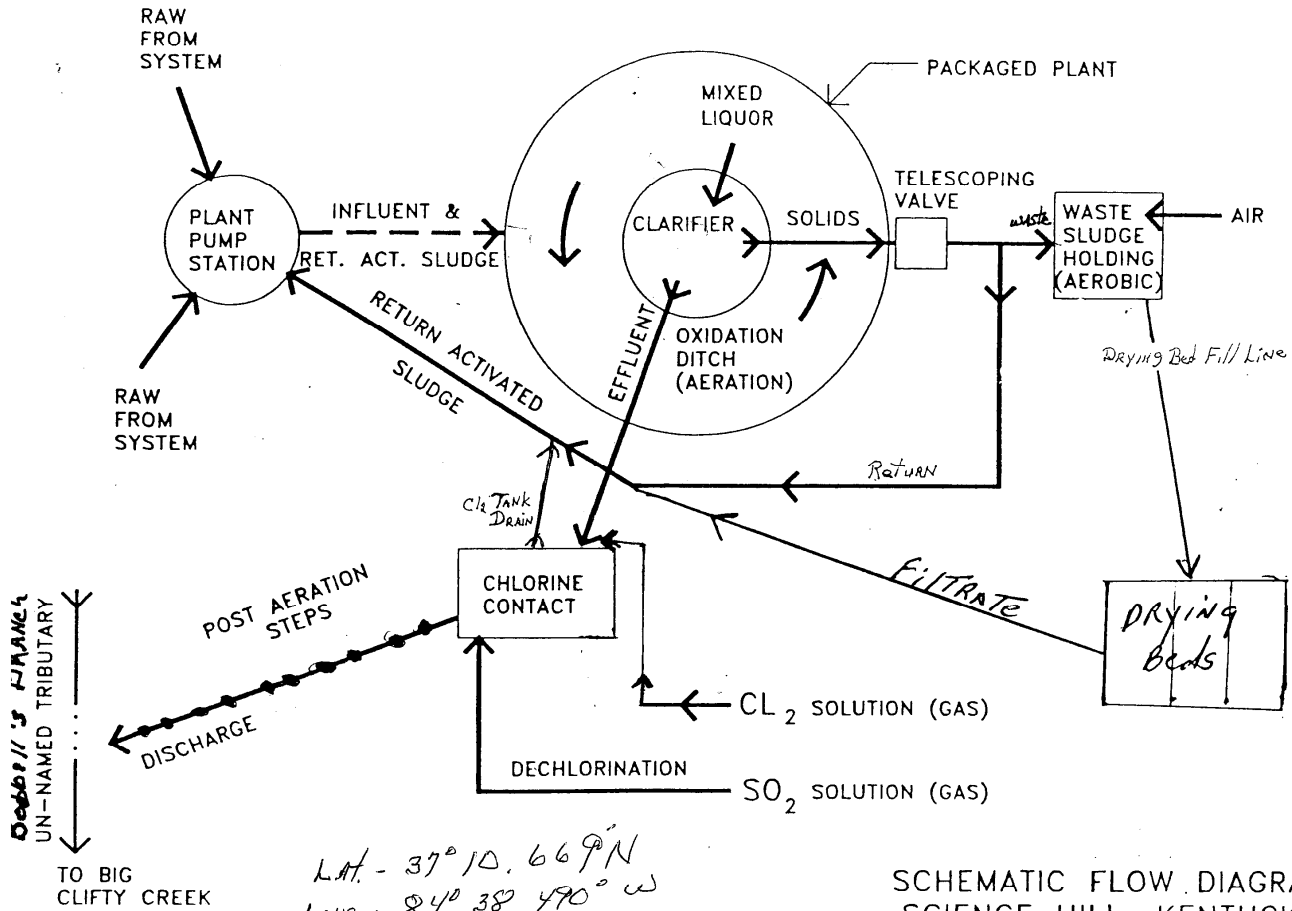
For further information on the draft permit or comment process, contact the individual identified on the Public Notice or the Permit Writer - Diana Davidson at (502) 564-8158, extension 4901, or email [Diana.Davidson@ky.gov](mailto:Diana.Davidson@ky.gov).

**12. PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final decision, deadline for comments and other information required by 401 KAR 5:075, Section 4(2)(e).







LAT. - 37° 10.66' N  
 LONG. - 84° 38.47' W  
 ELEV. 1063.0 FT.

SCHEMATIC FLOW DIAGRAM  
 SCIENCE HILL, KENTUCKY  
 SEWAGE TREATMENT FACILITY  
 SHEET 2 of 2

# KPDES



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

# PERMIT

PERMIT NO.: KY0094447  
AI NO.: 3830

### AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

City of Science Hill  
P.O. Box 97  
Science Hill, Kentucky 42553

is authorized to discharge from a facility located at

Science Hill Waste Water Treatment Plant  
400 Ebright Street  
Science Hill, Pulaski County, Kentucky

to receiving waters named

Bobbitt's Branch of Big Clifty Creek at latitude 37° 10' 40" and longitude 84° 38' 29"

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, IV, V and VI hereof. The permit consists of this cover sheet, and Part I 2 pages, Part II 1 pages, and Part III 1(1) page, and Part IV 1 pages, and Part V(3) pages.

This permit shall become effective on.

This permit and the authorization to discharge shall expire at midnight,

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Sandra L. Gruzesky, Director  
Division of Water

## PART I A - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 - Sanitary Wastewater (Design Flow = 0.150 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	(lbs/day) <u>Monthly Avg.</u>	<u>Daily Max.</u>	<u>Other Units (Specify) Monthly Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Effluent Flow (MGD)	Report	Report	N/A	N/A	Continuous	Recorder
Influent Flow (MGD)	Report	Report	N/A	N/A	1/Week	Instantaneous
Effluent CBOD <sub>5</sub> (mg/l)	31.3	46.9	25	37.5	1/Week	24 Hr Composite
Influent CBOD <sub>5</sub> (mg/l)	Report	Report	Report	Report	1/Week	24 Hr Composite
Percent Removal CBOD <sub>5</sub> (%)			85 or greater		1/Month	Calculated
Effluent TSS (mg/l)	37.5	56.3	30	45	1/Week	24 Hr Composite
Influent TSS (mg/l)	Report	Report	Report	Report	1/Week	24 Hr Composite
Percent Removal TSS (%)			85 or greater		1/Month	Calculated
Ammonia Nitrogen (as mg/l N)						
May 1 - October 31	5.01	7.52	4.0	6.0	1/Week	24 Hr Composite
November 1 - April 30	12.5	18.75	10	15	1/Week	24 Hr Composite
<i>Escherichia Coli</i> (N/100 ml)	N/A	N/A	130	240	1/Week	Grab
Dissolved Oxygen (mg/l) (minimum)	N/A	N/A	Not less than	7.0	1/Week	Grab
pH (standard units)	N/A	N/A	6.0 (min)	9.0 (max)	1/Week	Grab
Total Residual Chlorine (mg/l)	N/A	N/A	0.011	0.019	1/Week	Grab
Total Phosphorus (mg/l)	N/A	N/A	Report	Report	1/Week	24 Hr Composite
Total Nitrogen (mg/l)	N/A	N/A	Report	Report	1/Week	24 Hr Composite

The abbreviation CBOD<sub>5</sub> means Carbonaceous Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation N/A means Not Applicable.

The effluent limitations for CBOD<sub>5</sub> and TSS are Monthly (30 day) and Weekly (7 day) Averages.

The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.

Total Nitrogen is to be reported as the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

**PART I B - SCHEDULE OF COMPLIANCE**

The permittee shall achieve compliance with all requirements on the effective date of this permit.

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## **PART II - STANDARD CONDITIONS FOR KPDES PERMIT**

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

All conditions of 40 CFR 122.41 (401 KAR 5:065, Section 2(1)) are hereby incorporated by reference as conditions of this permit.

For publicly owned treatment works the conditions of 40 CFR 122.42 (b) (401 KAR 5:065, Section (2)) are hereby incorporated as conditions of this permit.

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## **PART III - OTHER REQUIREMENTS**

### **A. Reporting of Monitoring Results**

Monitoring results obtained during each monitoring period must be reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you. The completed DMR for each monitoring period must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

Division of Water  
Columbia Regional Office  
2751 Campbellsville Road  
Columbia, Kentucky 42728  
ATTN: Supervisor

Division of Water  
Surface Water Permits Branch  
Permit Support Section  
200 Fair Oaks Lane  
Frankfort, Kentucky 40601

### **B. Reopener Clause**

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

### **C. Sludge Disposal**

The disposal or final use of sewage sludge generated during the treatment of domestic sewage in a treatment works shall be disposed of in accordance with federal requirements specified in 40 CFR Part 503 and state requirements specified in Division of Waste Management regulations 401 KAR Chapter 45.

### **D. Certified Operators**

This wastewater system shall be operated under the supervision of a Class II Kentucky Certified Operator who shall be reasonably available at all times.

### **G. Outfall Signage**

The permittee shall post a permanent marker at all discharge locations and/or monitoring points. The marker shall be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and shall be posted as near as possible to the actual sampling location.

## **PART IV - PRETREATMENT REQUIREMENTS**

### **A. Annual Sewer User Surveys**

The permittee shall conduct annual sewer user surveys to determine if conditions warrant the development and implementation of a pretreatment program. An annual report listing the industrial users, the manufacturing processes, the nature and volume of flow and any problems caused by the users shall be submitted no later than December 31 of each year, unless otherwise specified by the Division of Water.

### **B. Necessity to Develop and Implement a Pretreatment Program**

POTWs which meet one or more of the following criteria are required to develop, submit for approval, and implement specific Pretreatment Program Requirements.

A POTW or combination of POTWs operated by the same authority, with a total design flow greater than five (5) million gallons per day (MGD) and receiving from industrial users which pass through or interfere with the operation of the POTW, or are otherwise subject to pretreatment standards.

A POTW with a design flow of five (5) MGD or less shall develop a pretreatment program if the cabinet determines that the nature or volume of the industrial wastewaters, upsets of the treatment process, violations of the POTW effluent limitations, contamination of municipal sludge or other circumstances warrant to prevent interference with the POTW or pass through.

### **C. Prohibited Discharges**

The following are prohibited from being discharged to the POTW.

- ❖ Pollutants which create a fire or explosion hazard in the POTW;
- ❖ Pollutants which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0 unless the works is specifically designed to accommodate such discharges;
- ❖ Solid or viscous pollutants in amounts which will cause obstruction to the flow in sewers, or other interference with operation of the POTW;
- ❖ Any pollutant, including oxygen demanding pollutants (BOD<sub>5</sub>, etc.), released in a discharge at such a volume or strength as to cause interference in the POTW;
- ❖ Heat in amounts, which will inhibit biological activity in the POTW, but in no case, heat in such quantities that the influent to the sewage treatment works exceeds 104° F (40° C) unless the Approval Authority upon request of the POTW approves alternate temperature limits;
- ❖ Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through;
- ❖ Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and,
- ❖ Any trucked or hauled waste except, at discharge points designated by the POTW.



## **PART V - BEST MANAGEMENT PRACTICES**

### **SECTION A. GENERAL CONDITIONS**

#### **1. Applicability**

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.01-010(35) and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

#### **2. BMP Plan**

The permittee shall develop and implement a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. A Best Management Practices (BMP) plan will be prepared by the permittee unless the permittee can demonstrate through the submission of a BMP outline that the elements and intent of the BMP have been fulfilled through the use of existing plans such as the Spill Prevention Control and Countermeasure (SPCC) plans, contingency plans, and other applicable documents.

#### **3. Implementation**

If this is the first time for the BMP requirement, then the plan shall be developed and submitted to the Division of Water within 90 days of the effective date of the permit. Implementation shall be within 180 days of that submission. For permit renewals the plan in effect at the time of permit reissuance shall remain in effect. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be submitted to the Division of Water and implemented as soon as possible.

#### **4. General Requirements**

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- b. Establish specific objectives for the control of toxic and hazardous pollutants.
  - (1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants," the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.

- c. Establish specific Best Management Practices to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
- d. Include any special conditions established in part b of this section.
- e. Be reviewed by plant engineering staff and the plant manager.

**5. Specific Requirements**

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document," and shall include the following baseline BMPs as a minimum.

- a. BMP Committee
- b. Reporting of BMP Incidents
- c. Risk Identification and Assessment
- d. Employee Training
- e. Inspections and Records
- f. Preventive Maintenance
- g. Good Housekeeping
- h. Materials Compatibility
- i. Security
- j. Materials Inventory

**6. SPCC Plans**

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

**7. Hazardous Waste Management**

The permittee shall assure the proper management of solid and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

**8. Documentation**

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available upon request to NREPC personnel. Initial copies and modifications thereof shall be sent to the following addresses when required by Section 3:

Division of Water  
Columbia Regional Office  
2751 Campbellsville Road  
Columbia, Kentucky 42728  
ATTN: Supervisor

Division of Water  
Surface Water Permits Branch  
Operational Permits Section  
200 Fair Oaks Lane  
Frankfort, Kentucky 40601

9. **BMP Plan Modification**

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. **Modification for Ineffectiveness**

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants," then the specific objectives and requirements under paragraphs b and c of Section 4, the permit, and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

**SECTION B. SPECIFIC CONDITIONS**

**Periodically Discharged Wastewaters Not Specifically Covered By Effluent Conditions**

The permittee shall include in this BMP plan procedures and controls necessary for the handling of periodically discharged wastewaters such as intake screen backwash, meter calibration, fire protection, hydrostatic testing water, water associated with demolition projects, etc.